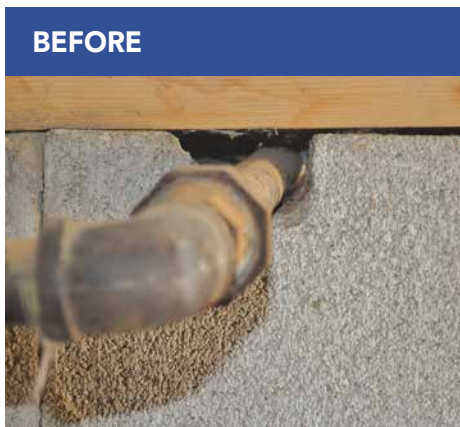




Air Seal Sill Plate and Rim Joist

Job Aid for Air Seal and Insulate Walls of a Conditioned Subspace (Basement or Crawl Space) Badge

Aligns With Standard Work Specifications 3.0104.1



Air movement around sill plates and near rim joists needs to be addressed before insulating.



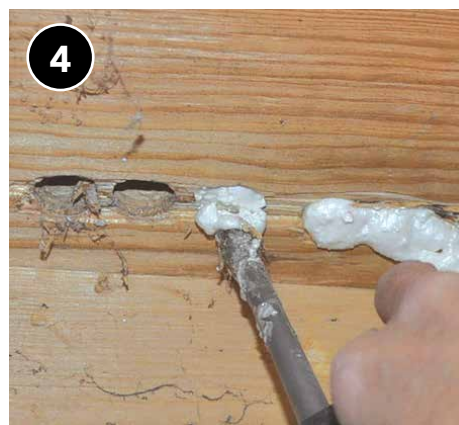
For exterior holes larger than 1/4 inch, use steel wool or other pest blocking material before sealing.



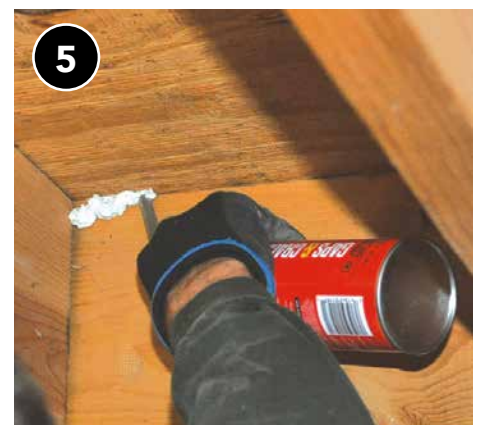
Install backing material to fill space.



Install sealant to hold backing material in place and air seal.



Seal penetrations (electrical, plumbing, empty holes, etc.) at the subfloor that are located within the rim joist pocket.



Push sealant into seams where framing members meet while installing a continuous bead around all four sides of the pocket including any gaps in the sill plate.

AFTER



A continuous seal is achieved and the pocket is ready for insulation. Note: if using two-part foam to air seal and insulate, step 5 can be accomplished by spraying the outer edges of the pocket using a picture frame technique, then working towards the inside of the cavity to insulate.



Checklist

Air seal and insulate walls of a conditioned subspace (basement or crawl space)

DESIRED OUTCOME

Subspace is air sealed and insulated to achieve best thermal performance possible while preventing moisture condensation on the inside of band joists or other wall cavities.¹

Air sealing:

- ☐ Rim joist, sill plate, and adjacent surfaces and any walls to be treated were sufficiently cleaned and free of debris to allow for the proper adhesion of any caulks, adhesives, or spray foam used during installation.
- ☐ All penetrations greater than ¼" filled with backing, steel wool, or other pest-proof material before air sealing.
- ☐ Air sealing forms a continuous air barrier on the warm side of the thermal boundary, including floor-to-wall and wall-to-ceiling connections.

Insulation:

- ☐ On walls (basements² or crawl spaces), attach insulation with a durable connector equal to or better than manufacturer specifications.
- ☐ On rim joists, install foam-based or vinyl-faced fiberglass batt insulation tightly to the cavity and seal at all edges.
- ☐ Use fire-rated material if the insulation is to be left exposed.
- ☐ Ensure that the insulation has no gaps, voids, compression, or misalignment.
- ☐ Fill out applicable sections of the house-wide insulation certificate with coverage area, thickness, and R-value.

1. Relevant Standards: 3.0104.1

2. Where termite pressure exists, a 3-inch inspection gap will be maintained from the top of the insulation to the bottom of any wood to allow for termite detection. This varies by region and should be incorporated into the badge inspection criteria where applicable.

